Heidar Thor Thrastarson - Curriculum Vitae

Date and place of birth: July 10, 1979, in Reykjavik, Iceland.

Nationality: Icelandic.

Address: Jet Propulsion Laboratory, California Institute of Technology,

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EDUCATION Queen Mary University of London, UK

Oct 2007 - Nov 2011

PhD in astrophysics.

"General Circulation Modelling of Close-in Extrasolar Giant Planets".

Thesis advisor: Dr. James Y-K. Cho.

Uppsala University, Sweden

Aug 2005 - Sep 2007

MSc in physics, specializing in astrophysics.

 ${\bf Dissertation:} \ \ \textit{``Radiation Energy Transport in Hydrodynamical'}$

Models of Protoplanetary Disks". Advisor: Dr. Nikolai Piskunov.

University of Iceland, Reykjavik

Aug 1999 - Jun 2003

B.Sc. in Physics.

Kopavogur Grammar School, Kopavogur, Iceland

Aug 1995 - Jun 1999

Senior secondary school/college education. Graduated from the field of natural sciences with an average mark of 88,4%.

Professional Experience

Jet Propulsion Laboratory, California Institute of Technology,

Pasadena, California

NASA Postdoctoral Fellow From Nov, 2011

Swedish 1-meter Solar Telescope,

Roque de los Muchachos, La Palma, Spain

Observations assistant Jun - Aug, 2007

Landspitali - University Hospital,

Department of Radiation Physics

Reykjavik, Iceland

Physicist in Radiotherapy for Cancer

Sep, 2003 - Aug, 2005 and Jun - Aug, 2006

Iceland Science Institute,

Reykjavik, Iceland

Research Assistant Jun - Aug, 2003 and Jun - Aug, 2002

Sony DADC,

Anif, Austria

Trainee Jun - Jul, 2001

Teaching

Queen Mary University of London, UK

Teaching Assistant

2007-2010

Taught exercise classes/tutorials and marked coursework for first and second year university level Calculus and Engineering Maths.

Iceland Technical University, Reykjavik, Iceland

Teaching Assistant

Spring, 2004 and 2005

Supervised experiments in a radiation physics course for radiology students.

University of Iceland, Reykjavik, Iceland

Teaching Assistant

Aug - Dec, 2004

Supervised a group of engineering students in the experimental part of a first year university physics course.

PUBLICATIONS

Thrastarson, H. Th. & Cho, J.Y-K. 2010. "Effects of Initial Flow on Close-in Planet Atmospheric Circulation". Astrophysical Journal, Volume 716, Issue 1, pp. 144-153.

Thrastarson, H. Th. & Cho, J.Y-K. 2011. "Relaxation Time and Dissipation Interaction in Hot Planet Atmospheric Flow Simulations". Astrophysical Journal, Volume 729, pp. 117.

Polichtchouk, I., Cho, J.Y-K, Watkins, C., **Thrastarson, H. Th.**, Umurhan, O.M. & de la Torre Juarez, M. "Intercomparison of General Circulation Models for Hot Extrasolar Planets". Submitted to Icarus.

SEMINARS AND PRESENTATIONS

Jet Propulsion Laboratory, Pasadena, California, USA

July, 2013

Circulation and Variability of Close-In Exoplanet Atmospheres.

Poster presented at the JPL Postdoc Research Day.

Annapolis, Maryland, USA

June, 2013

General Circulation and Variability of Close-In Exoplanet Atmospheres. Poster presented at the AGU Chapman Conference: Crossing the Boundaries in Planetary Atmospheres - From Earth to Exoplanets.

UCLA, Los Angeles, California, USA

June, 2013

General Circulation Modelling of Close-in Extrasolar Planets

iPLEX Lunch Seminar.

San Francisco, California, USA

Dec, 2012

General Circulation and Variability of Close-In Exoplanet Atmospheres.

Poster presented at the Fall Meeting of the American Geophysical Union.

Madrid, Spain Sep, 2012

General Circulation and Variability of Close-In Exoplanet Atmospheres and Intercomparison of GCMs for Hot Extrasolar Planets.

Talks given at the European Planetary Science Congress.

Jet Propulsion Laboratory, Pasadena, California, USA

July, 2012

Circulation and Variability of Close-In Exoplanet Atmospheres.

Poster presented at the JPL Postdoc Research Day.

Aspen Physics Center, Colorado, USA

June, 2012

General Circulation Modeling of Hot Jupiters.

Talk given at a Workshop on Stochastic Flows and Climate Modeling.

California Institute of Technology, Pasadena, California, USA

Feb, 2012

General Circulation Modeling of Close-in Extrasolar Planets

Yuk Lunch Seminar

Royal Astronomical Society, London, UK

Atmospheric Dynamics of Hot Jupiters

Talk given at the RAS Specialist Discussion Meeting, Dynamics and
Composition of (Exo)Planet Atmospheres

Jet Propulsion Laboratory, Pasadena, California, USA

General Circulation Modeling of Close-in Extrasolar Planets

Talk given at the Astrophysics and Exoplanet Science Seminar

Feb, 2011

Kavli Institute of Theoretical Physics, Santa Barbara, California, USA

General Circulation Modeling of Close-in Extrasolar Planets

Poster presented at the conference, Exoplanets Rising

Kobe, Japan Jan, 2010

General Circulation Modeling of Close-in Extrasolar Planets
Poster presented at the CPS 6th International School of Planetary Sciences
– Planetary Atmospheres

Vienna, Austria

General Circulation Modeling of Extrasolar Planets

Invited talk at the European Geophysical Union meeting

Grants and Awards

JPL Outstanding Postdoc Research Award, Planetary Science and Life Detection (2013)

NASA Postdoctoral Program Fellowship.

Royal Astronomical Society Research and Grants Fund.

Awarded to support attendance at the KITP program, The Theory and Observation of Exoplanets.

Institute of Physics Research Student Conference Fund.

CR Barber Trust Fund, Institute of Physics.

Center for Planetary Science Travel Grant.

Funding for the CPS School of Planetary Science, Kobe, Japan.

Anna and Allan Löfbergs stipend.

A grant awarded to young scientists, aimed at research on the origin of planetary systems.

Professional Activity

Referee for The Astrophysical Journal and Icarus.

Convener for the session Nonlinear Processes in Planetary Atmospheres and Protoplanetary Disks at the Fall Meeting of the American Geophysical Union, December, 2012.

Participant in the Workshop on Stochastic Flows and Climate Modeling at the Aspen Physics Center, May - June, 2012.

Affiliate member at the Kavli Institute of Theoretical Physics program *The Theory and Observations* of Exoplanets, in Santa Barbara, March - May, 2010.

Leader and organizer of weekly meetings of the Planetary Atmospheres and Dynamics group, University of London, 2009-2010.

Fellow of the Royal Astronomical Society.

Member of the American Geophysical Union.

- Computer Skills $\,\,$ $\,$ $\,$ Operating Systems: Mac OS X, Unix/Linux, Windows.
 - Programming languages and software: Fortran 90, MATLAB, shell scripting, NCAR Command

Languages

Icelandic (native language), fluent English and Swedish, good knowledge of Danish, basic German, French, Italian (high school studies) and Spanish, understand Norwegian.